

ATTORNEY DOCKET NO. 00014

PATENT

DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below my name;

I believe I am the original, first, and sole inventor (if only one name is listed below), or an original, first, and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled "NITRIDED VALVE METALS AND PROCESSES FOR MAKING THE SAME," the specification of which [] is attached hereto and/or [X] was filed as Serial No. 09/795,947 on 28 February 2001 and was amended on _____ (if applicable); or was filed as PCT International Application Number _____ on _____ and was amended on _____ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, §§119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed:

COUNTRY (If PCT indicate PCT)	APPLICATION NO.	DATE OF FILING (day, month, year)	PRIORITY CLAIMED
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No

Declaration and Power of Attorney

ATTORNEY DOCKET NO. 00014

PATENT

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below:

PROVISIONAL APPLICATION NUMBER(S)	FILING DATE (day, month, year)
60/185,979	1 March 2000

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s), or of 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

U.S. PATENT APPLICATIONS		STATUS (Check one)		
U.S. APPLICATION NO.	U.S. FILING DATE	PATENTED	PENDING	ABANDONED
PCT APPLICATIONS DESIGNATING THE U.S.				
PCT APPLICATION NO.	PCT FILING DATE	U.S. SERIAL NO. ASSIGNED (if any)		

As a named inventor, I hereby appoint Martha Ann Finnegan (Registration No. 31,453), Michelle B. Lando (Registration No. 33,941), and Luke A. Kilyk (Registration No. 33,251), as my attorney with full power of substitution and revocation, to prosecute this application and transact all business in the United States Patent and Trademark Office connected therewith.

Please address all communications regarding this application to:

Martha Ann Finnegan, Esq.
Cabot Corporation
157 Concord Road
Billerica, MA 01821
Telephone: (978) 670-6198
Facsimile: (978) 670-8027

Declaration and Power of Attorney

ATTORNEY DOCKET NO. 00014

PATENT

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

First Inventor's Signature: Bhamidipaty K.D.P. Rao by Shi Y Oct. 18, 2001
By Shi YUAN, a Joint Inventor, on Behalf of the Non-Signing
Administrator(trix), Executor(trix), or Legal Representative of
Bhamidipaty K.D.P. RAO, Deceased

(See Added Pages)

Full Name of First Inventor: Bhamidipaty K.D.P. RAO, Deceased

Date: Oct. 18, 2001 by Shi Y

Residence: 1513 Singer Road, Wyomissing, Pennsylvania 19610

Post Office Address: 1513 Singer Road, Wyomissing, Pennsylvania 19610

Citizenship: India

Second Inventor's Signature: Shi Y

Full Name of Second Inventor: Shi YUAN

Date: Oct. 18, 2001

Residence: 640 American Avenue, Apt. E410, King of Prussia, Pennsylvania 19406

Post Office Address: 640 American Avenue, Apt. E410, King of Prussia, Pennsylvania 19406

Citizenship: People's Republic of China

Declaration and Power of Attorney

ATTORNEY DOCKET NO. 00014

PATENT

**ADDED PAGE TO COMBINED DECLARATION AND POWER OF
ATTORNEY FOR SIGNING BY ADMINISTRATOR(TRIX), EXECUTOR(TRIX)
OR LEGAL REPRESENTATIVE ON BEHALF OF DECEASED OR
INCAPACITATED INVENTOR (37 CFR 1.42 and 1.43)**

I, Mrs. Kamiswari Bhamidipaty Rao
(type or print name(s) of administrator(trix), executor(trix), legal representative or all heirs)

hereby declare that I am a citizen of Unknown

residing at 1513 Singer Road, Wyomissing, Pennsylvania 19610 and that I am executing and
signing the declaration to which this is attached as

(check one):

- ☐ the administrator(trix) of
☒ executor(trix) of the last will and testament of
☐ legal representative (or heirs) of

Bhamidipaty K.D.P. RAO

Full name of (first, second etc.) deceased or incapacitated inventor

India

County of citizenship of deceased or incapacitated inventor

1513 Singer Road, Wyomissing, Pennsylvania 19610

Residence of deceased or incapacitated inventor

1513 Singer Road, Wyomissing, Pennsylvania 19610

Post Office Address of deceased or incapacitated inventor

NOTE: The name of the first, second etc. deceased or incapacitated inventor should preferably also be filled in at the appropriate prior space of the declaration adding the words "deceased - completed on added page" or "incapacitated - completed on added page."

That, upon information and belief, I aver those facts that the inventor is required to state.

Date: _____

Signature of Administrator(trix), executor(trix),
legal representative (or all heirs)

Declaration and Power of Attorney

ATTORNEY DOCKET NO. 00014

PATENT

**ADDED PAGE TO COMBINED DECLARATION
AND POWER OF ATTORNEY FOR SIGNATURE BY JOINT INVENTOR(S)
ON BEHALF OF NONSIGNING INVENTOR(S) WHO REFUSE(S)
TO SIGN OR CANNOT BE REACHED (37 CFR 1.47(a))**

WARNING:

"37 C.F.R. § 1.47(a) and 35 U.S.C. § 116 ¶ 2 require all available joint inventors to file an application 'on behalf' of themselves and on behalf of a joint inventor who 'cannot' be found or reached after diligent effort" "or who refuses to join in an application." M.P.E.P. § 409.03(a), 6th ed. rev. 3 (emphasis added). See also 62 Fed. Reg. 53,131, 53,137, 203 O.G. 68 (Oct. 10 1997).

I. I am an above named joint inventor and have signed this declaration on my own behalf and also sign this declaration under 37 CFR 1.47(a) on behalf of the Non-Signing Administrator(trix), Executor(trix), or Legal Representative on behalf of Bhamidipaty K.D.P. RAO, Deceased, joint inventor, particulars for whom are:

Full name of (first, second, etc.) Bhamidipaty K.D.P. RAO, Deceased
inventor whose Administrator(trix), Executor(trix), or Legal Representative, on information and belief,

☒ refuses to sign

☐ cannot be found or reached

India
Country of Citizenship of nonsigning inventor

1513 Singer Road, Wyomissing, Pennsylvania 19610
Last known address of nonsigning inventor

Mrs. Kamiswari Bhamidipaty Rao
Name of Spouse of Deceased Inventor

1513 Singer Road, Wyomissing, Pennsylvania 19610
Last known address of Spouse of Deceased Inventor

Barry W. Sawtelle, Esq., KOZLOFF STOUDT, P.C., 2640 Westview Drive, PO Box 6286, Wyomissing, PA 19610
Name and Address of Attorney for Mrs. Rao

Shi YUAN
(typed name of joint inventor
signing on behalf of Non-Signing
Administrator(trix), Executor(trix),
or Legal Representative of
Bhamidipaty K.D.P. RAO, deceased
inventor)

Shi YUAN
Signature

Declaration and Power of Attorney

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: RAO, deceased, *et al.* EXAMINER: To be Assigned
SERIAL NO.: 09/795,947 GROUP: To be Assigned
FILED: 28 February 2001
FOR: NITRIDED VALVE METALS AND PROCESSES FOR MAKING
THE SAME

COMMISSIONER FOR PATENTS
WASHINGTON, DC 20231

Dear Sir:

DECLARATION OF MARTHA ANN FINNEGAN
IN SUPPORT OF
PETITION UNDER 37 C.F.R. § 1.47(a)

I, Martha Ann Finnegan, do hereby declare the following on my own personal knowledge, except where otherwise noted below:

1. Cabot Corporation is the owner of the above-identified application pursuant to the written Assignment of Provisional Patent Application No. 60/185,979, filed 1 March 2000,

CERTIFICATION UNDER 37 CFR 1.10

I hereby certify that this paper (along with any document or paper referred to herein) is being deposited with the United States Postal Service on this date, 18 OCTOBER 2001, in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number EL886079545US, addressed to: Box Missing Parts, The Commissioner for Patents, Washington, D.C. 20231.

Marlene R. Fitch

Name of person mailing paper

Marlene R. Fitch

Signature

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: RAO, deceased, *et al.* EXAMINER: To be Assigned
SERIAL NO.: 09/795,947 GROUP: To be Assigned
FILED: 28 February 2001
FOR: NITRIDED VALVE METALS AND PROCESSES FOR MAKING THE
SAME

COMMISSIONER FOR PATENTS
WASHINGTON, DC 20231

Dear Sir:

PETITION UNDER 37 C.F.R. § 1.47(a)

Joint Inventor Shi Yuan and assignee, Cabot Corporation, petition to file the above-identified application under 37 C.F.R. § 1.47(a) without the signature of the Administrator(trix), Executor(trix), or Legal Representative on behalf of joint inventor, Bhamidipaty K.D.P. RAO, who is deceased. Transmitted herewith is a Declaration and Power of Attorney executed by Shi YUAN on behalf of himself and on behalf of the Administrator(trix), Executor(trix), or Legal Representative, on behalf of joint inventor, Bhamidipaty K.D.P. RAO, deceased., pursuant to 37 C.F.R. §1.64.

CERTIFICATION UNDER 37 CFR 1.10

I hereby certify that this paper (along with any document or paper referred to herein) is being deposited with the United States Postal Service on this date, 18 OCTOBER 2001, in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number EL886079545US, addressed to: Box Missing Parts, The Commissioner for Patents, Washington, D.C. 20231.

Marlene R. Fitch

Name of person mailing paper

Marlene R. Fitch

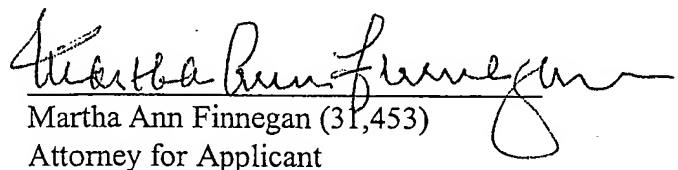
Signature

This Petition is supported by the Declaration of Martha Ann Finnegan. The Declaration and exhibits thereto attest to the non-response of counsel for the Administrator(trix), Executor(trix), or Legal Representative, to Cabot Corporation's request to obtain a declaration signed by the Administrator(trix), Executor(trix), or Legal Representative in respect of the above-identified application on behalf of joint inventor, Bhamidipaty K.D.P. RAO, who is deceased.

It is respectfully requested that this Petition be granted and that the Declaration and Power of Attorney executed by Shi YUAN on behalf of himself and on behalf of the Administrator(trix), Executor(trix), or Legal Representative, on behalf of joint inventor, Bhamidipaty K.D.P. RAO, who is deceased., pursuant to 37 C.F.R. §1.64, be accepted in satisfaction of the requirements of 37 C.F.R. §§ 1.47(a) and 1.64.

Please charge any fee that may be due in connection with this Petition to Deposit Account 03-0060.

Respectfully submitted,


Martha Ann Finnegan (31,453)
Attorney for Applicant

Date: 18 October 2001

CABOT CORPORATION
157 Concord Road
Billerica, Massachusetts 01821
Tel. No. (978) 670-6198
Fax No. (978) 670-8027

entitled "NITRIDED VALVE METALS AND PROCESSES FOR MAKING THE SAME" and the inventions set forth and described therein, by Bhamidipaty K.D.P. Rao and Shi Yuan to Cabot Corporation. This Assignment is recorded in the United States Patent and Trademark Office at Reel/Frame 010962/0221. A copy of this Assignment is attached hereto as Exhibit A. The above-identified application claims priority from Serial No. 60/185,979 under 35 U.S.C. §119(e).

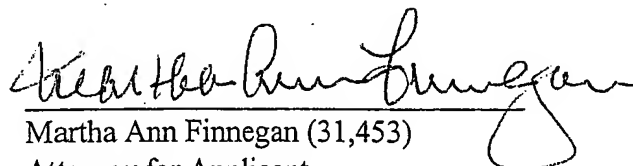
2. Bhamidipaty K.D.P. Rao died unexpectedly in September 2000.
3. On information and belief, Mrs. Kamiswari Bhamidipaty Rao, the widow of Bhamidipaty K.D.P. Rao, is the executrix of her deceased husband's estate. The last known address for Mrs. Rao is 1513 Singer Road, Wyomissing, Pennsylvania 19610.
4. In March 2001, Cabot Corporation received a letter from Barry W. Sawtelle, Esq. advising Cabot Corporation that he represents Mrs. Kamiswari Bhamidipaty Rao, the widow of Bhamidipaty K.D.P. Rao. Mr. Sawtelle's address is Kozloff Stoudt, P.C., 2640 Westview Drive, PO Box 6286, Wyomissing, PA 19610.
5. On 28 September 2001, a letter was sent by the undersigned by Express Mail (Express Mail No. EL 886079673 US) to Barry W. Sawtelle, Esq., as Mrs. Rao's attorney, at Kozloff Stoudt, P.C., 2640 Westview Drive, PO Box 6286, Wyomissing, PA 19610, forwarding a copy of a Declaration and Power of Attorney for the application for signature by Mrs. Rao as executrix of the estate of Bhamidipaty K.D.P. Rao and a copy of the application. Copies of the letter, attachments, and Express Mail label are attached hereto as Exhibit B.
6. The letter to Attorney Sawtelle was delivered on 1 October 2001 in Reading, PA to S. Bucjart (address of recipient: P.O. Box 6286). A copy of the delivery information received from the U.S. Postal Service is attached as Exhibit C.

7. When, as of 15 October 2001, no response to the 28 September 2001 letter had been received, the undersigned telephoned the offices of Attorney Sawtelle. The undersigned was put into Attorney Sawtelle's voice-mail. The undersigned left a message requesting a return telephone call.

8. To date, the undersigned has received no call or other reply to either the 28 September 2001 letter or 15 October 2001 telephone message.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully submitted,


Martha Ann Finnegan (31,453)
Attorney for Applicant

Date: 18 October 2001

CABOT CORPORATION
157 Concord Road
Billerica, Massachusetts 01821
Tel. No. (978) 670-6198
Fax No. (978) 670-8027

EXHIBIT A



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

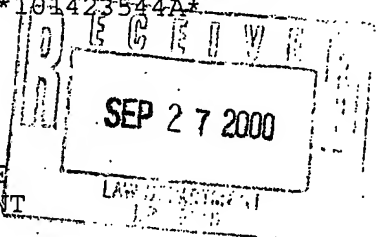
SEPTEMBER 20, 2000

PTAS

CABOT CORPORATION
MARTHA ANN FINNEGAN
LAW DEPARTMENT
157 CONCORD ROAD
BILLERICA, MA 01821



101423544A



UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 07/03/2000

REEL/FRAME: 010962/0221
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

RAO, BHAMIDIPATY K. D. P.

DOC DATE: 05/23/2000

ASSIGNOR:

YUAN, SHI

DOC DATE: 05/23/2000

ASSIGNEE:

CABOT CORPORATION
75 STATE STREET
BOSTON, MASSACHUSETTS 02109

SERIAL NUMBER: 60185979
PATENT NUMBER:

FILING DATE: 03/01/2000
ISSUE DATE:

MARY BENTON, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

MF

entered in
MDC
10/31/00
MRE

08-04-2000

Form PTO-1595


 U.S. DEPARTMENT OF COMMERCE
 Patent and Trademark Office
 Docket No. 00014P

7.3.00

R1

 101423544
 PATENTS ONLY

JET

To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

 Bhamidipaty K. D. P. Rao
 Shi Yuan

2. Name and address of receiving party(ies):

Name: Cabot Corporation

Internal Address:

Street Address:

75 State Street

Additional name(s) of conveying party(ies) attached? No

3. Nature of Conveyance:

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Other

City: Boston State: MA ZIP 02109

Additional name(s) & address(es) attached? ☐ Yes ☒ No

Execution Date(s):

May 23, 2000

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)

60/185,979

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ NoAdditional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Martha Ann Finnegan

Internal Address: Law Department

 Street Address: Cabot Corporation
 157 Concord Road

City: Billerica State MA ZIP 01821

Total Number of applications and patents involved: 1

Total fee (37 CFR 3.41): \$

40.00

☐ Enclosed☒ Authorized to be charged to deposit account

8. Deposit Account Number: 03-0060

☒ Duplicate Copy of this page is attached.

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Martha Ann Finnegan

Name of Person Signing, Reg. 31,453

30 June 2000

Signature

Date

Total number of pages including cover sheet: 3

CERTIFICATION OF MAILING (37 C.F.R. §1.8(a))

OMB No. 0651-0011 Do not detach this portion:

Mail documents to be recorded with required cover sheet information to:

 Commissioner of Patents and Trademarks
 Box Assignments
 Washington, D.C. 20231

I hereby certify that, on the date shown below, this correspondence (along with any paper referred to as attached or enclosed) is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Box Assignments, Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office, Washington, D.C. 20231.

Marlene R. Fitch

30 June 2000

Date

Public burden reporting for this sample cover sheet is estimated to average about 30 minutes per document to be recorded, including time for reviewing the document and gathering the data needed, and completing and reviewing the sample cover sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Office of Information Systems, PK2-1000C, Washington, D.C. 20231, and to the Office of Management and Budget, Paperwork Reduction Project, (0651-0011), Washington, D.C. 20503.

H:\Fitch\Assignments\00014P-Cover.doc

08/03/2000 DNGUYEN 00000147 030060 60185979

01 FC:581

40.00 CH

ASSIGNMENT

We, **BHAMIDIPATY K. D. P. RAO**, citizen of India, residing at 1513 Singer Road, Wyomissing, Pennsylvania 19610; and **SHI YUAN**, citizen of People's Republic of China, residing at 640 American Avenue, Apt. E410, King of Prussia, Pennsylvania 19406, respectively, having invented the subject matter described in U.S. Provisional Patent Application entitled, "**NITRIDED VALVE METALS AND PROCESSES FOR MAKING THE SAME**," the specification of which was filed on March 1, 2000, in the United States Patent and Trademark Office, as Serial No. 60/185,979, for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, hereby sell, assign, and transfer to **Cabot Corporation**, a Delaware corporation, having a principal place of business at 75 State Street, Boston, Massachusetts 02109-1806, its successors and assigns, the entire right, title and interest in and to said application and the inventions therein set forth and described, including all priority rights ensuing from said application, and any and all Letters Patent of the United States of America and of countries foreign thereto which may be granted on or for such inventions, together with the right to apply for such Letters Patent and all rights in any applications therefor. We further sell, assign and transfer to **Cabot Corporation** all right, title, and interest in any and all corresponding divisional, renewal, substitute, and continuation applications, and all corresponding reexamination and reissue certificates.

We hereby represent and warrant that there are no rights or interests inconsistent with the rights and interests granted herein and that we will not execute any instrument or grant or transfer any rights or interests inconsistent with the rights and interest granted herein, and we, **BHAMIDIPATY K. D. P. RAO**, and **SHI YUAN**, bind ourselves and our respective heirs, executors, administrators and legal representatives, as the case may be, to execute and deliver to **Cabot Corporation**, its successors and assigns, any further documents or instruments and do any and all further acts that may reasonably be deemed necessary by **Cabot Corporation**, to enable **Cabot Corporation**, its successors and assigns to file applications for the invention(s) in any country where it may elect to file such applications, and that may be necessary to vest in **Cabot Corporation**, its successors and assigns, the title herein conveyed or intended so to be, and to enable such title to be recorded in the United States and foreign countries where such application or applications may be filed.

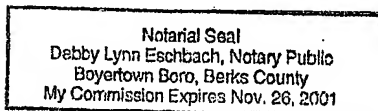
And we further covenant and agree, in consideration of the premises, that we and our respective heirs, executors, administrators and legal representatives, as the case may be, will at any time, upon request, communicate to **Cabot Corporation**, its successors and assigns, any facts relating to the invention and the improvements contained therein and the history thereof, known to us or our respective heirs, executors, administrators and legal representatives, as the case may be, and that we will testify as to the same in any interference or other litigation when requested so to do by **Cabot Corporation**, its successors and assigns.

IN TESTIMONY WHEREOF, I, **BHAMIDIPATY K. D. P. RAO**, have hereunto set my hand this 23 day of may, 2000.

Bhamidipaty K. D. P. Rao
BHAMIDIPATY K. D. P. RAO

COMMONWEALTH/STATE OF Pennsylvania
 COUNTY OF Berk

On this 23 day of may, 2000, before me personally appeared **BHAMIDIPATY K. D. P. RAO**, to me known and known to me to be the individual described in and who executed the foregoing instrument, and who duly acknowledged to me that he executed the same for the purpose therein set forth.



Member, Pennsylvania Association of Notaries

Debby Lynn Eschbach
 NOTARY PUBLIC
 My Commission Expires:

IN TESTIMONY WHEREOF, I, **SHI YUAN**, have hereunto set my hand this 23 day of MAY, 2000.

Shi Yuan
SHI YUAN

COMMONWEALTH/STATE OF Pennsylvania
 COUNTY OF Berks

On this 23 day of MAY, 2000, before me personally appeared **SHI YUAN**, to me known and known to me to be the individual described in and who executed the foregoing instrument, and who duly acknowledged to me that he executed the same for the purpose therein set forth.

Debby Lynn Eschbach
 NOTARY PUBLIC
 My Commission Expires:

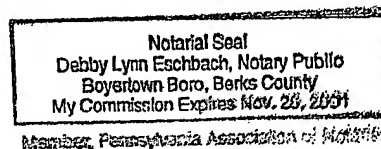


EXHIBIT B



Via Express Mail
Return Receipt Request

28 September 2001

Barry W. Sawtelle, Esq.
KOZLOFF STOUDT, P.C.
2640 Westview Drive
PO Box 6286
Wyomissing, PA 19610.

Martha Ann Finnegan
Chief Intellectual Property Counsel

**Re: Declaration and Power of Attorney for U.S. Patent
Application Filed by Cabot Corporation Naming Dr.
Bhamidipaty K.D.P. Rao as an Inventor**

Dear Mr. Sawtelle:

I understand that you represent Mrs. Bhamidipaty K.D.P. Rao. It is my further understanding that Mrs. Rao is the executrix of her late husband's estate. It is in this regard that I am writing to you.

On February 28th of this year, a U.S. provisional patent application (Serial No. 60/185,979), originally filed on 1 March 2000 and naming Dr. Rao as an inventor, was refiled by Cabot Corporation as non-provisional U.S. patent application Serial No. 09/795,947. (A copy of U.S. patent application Serial No. 09/759,947 is enclosed.)

By written Assignment signed by Dr. Rao on 23 May 2000, Dr. Rao assigned all of his rights in the provisional application, the invention described therein, and any later filed applications and patents based thereon to Cabot Corporation. The Assignment also contains certain future undertakings by Dr. Rao and his heirs, administrator, executor, and legal representative, as the case may be. A copy of the Assignment is enclosed for your reference.

In connection with the application filed in February of this year, we now must submit to the United States Patent and Trademark Office a Declaration and Power of Attorney signed by each of the inventors named in the application. In instances in which an inventor is deceased, the signature of the deceased inventor's

Barry W. Sawtelle, Esq.
28 September 2001
Page 2

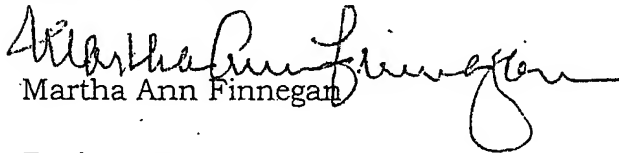
administrator(trix), executor(trix), or legal representative, as the case may be, is required.

To this end, I am enclosing for your review and the review and signature of Mrs. Rao, in her capacity as the executrix of Dr. Rao's estate, the above-referenced Declaration and Power Attorney for U.S. patent application Serial No. 09/795,947.

Please ask Mrs. Rao to complete the form in the places indicated and to also sign and date the Declaration and Power of Attorney in the places indicated and return the signed Declaration to me in the enclosed self-addressed postage paid Express Mail envelope.

In the meantime, if you have any questions, please do not hesitate to call me at the number shown below.

Very truly yours,


Martha Ann Finnegan

Enclosures

EL886079695US

DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below my name;

I believe I am the original, first, and sole inventor (if only one name is listed below), or an original, first, and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled "NITRIDED VALVE METALS AND PROCESSES FOR MAKING THE SAME," the specification of which [] is attached hereto and/or [X] was filed as Serial No. 09/795,947 on 28 February 2001 and was amended on _____ (if applicable); or was filed as PCT International Application Number _____ on _____ and was amended on _____ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, §§119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed:

COUNTRY (If PCT indicate PCT)	APPLICATION NO.	DATE OF FILING (day, month, year)	PRIORITY CLAIMED
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below:

PROVISIONAL APPLICATION NUMBER(S)	FILING DATE (day, month, year)
60/185,979	1 March 2000

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s), or of 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

U.S. PATENT APPLICATIONS		STATUS (Check one)		
U.S. APPLICATION NO.	U.S. FILING DATE	PATENTED	PENDING	ABANDONED
PCT APPLICATIONS DESIGNATING THE U.S.				
PCT APPLICATION NO.	PCT FILING DATE	U.S. SERIAL NO. ASSIGNED (if any)		

As a named inventor, I hereby appoint Martha Ann Finnegan (Registration No. 31,453), Michelle B. Lando (Registration No. 33,941), and Luke A. Kilyk (Registration No. 33,251), as my attorney with full power of substitution and revocation, to prosecute this application and transact all business in the United States Patent and Trademark Office connected therewith.

Please address all communications regarding this application to:

Martha Ann Finnegan, Esq.
Cabot Corporation
157 Concord Road
Billerica, MA 01821
Telephone: (978) 670-6198
Facsimile: (978) 670-8027

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

First Inventor's Signature: _____
Executrix for the Estate of Bhamidipaty K.D.P. RAO

Full Name of First Inventor: Bhamidipaty K.D.P. RAO, Deceased
(Completed on Added Page)

Date: _____

Residence: 1513 Singer Road, Wyomissing, Pennsylvania 19610

Post Office Address: 1513 Singer Road, Wyomissing, Pennsylvania 19610

Citizenship: India

Second Inventor's Signature: _____

Full Name of Second Inventor: Shi YUAN

Date: _____

Residence: 640 American Avenue, Apt. E410, King of Prussia, Pennsylvania 19406

Post Office Address: 640 American Avenue, Apt. E410, King of Prussia, Pennsylvania 19406

Citizenship: People's Republic of China

**ADDED PAGE TO COMBINED DECLARATION AND POWER OF
ATTORNEY FOR SIGNING BY ADMINISTRATOR(TRIX), EXECUTOR(TRIX)
OR LEGAL REPRESENTATIVE ON BEHALF OF DECEASED OR
INCAPACITATED INVENTOR (37 CFR 1.42 and 1.43)**

I, _____
(type or print name(s) of administrator(trix), executor(trix), legal representative or all heirs)

hereby declare that I am a citizen of _____

residing at 1513 Singer Road, Wyomissing, Pennsylvania 19610 and that I am executing and
signing the declaration to which this is attached as

(check one):

- ☐ the administrator(trix) of
☒ executor(trix) of the last will and testament of
☐ legal representative (or heirs) of

Bhamidipaty K.D.P. RAO

Full name of (first, second etc.) deceased or incapacitated inventor

India

County of citizenship of deceased or incapacitated inventor

1513 Singer Road, Wyomissing, Pennsylvania 19610

Residence of deceased or incapacitated inventor

1513 Singer Road, Wyomissing, Pennsylvania 19610

Post Office Address of deceased or incapacitated inventor

NOTE: The name of the first, second etc. deceased or incapacitated inventor should preferably also be filled in at the appropriate prior space of the declaration adding the words "deceased - completed on added page" or "incapacitated - completed on added page."

That, upon information and belief, I aver those facts that the inventor is required to state.

Date: _____

Signature of Administrator(trix), executor(trix),
legal representative (or all heirs)